

IN THE CLAIMS:

Please amend the claims as set forth below.

Cancel claims 1-57 without prejudice or disclaimer and add the following claims:

58. (New) A method for detecting the presence or diagnosing the risk of prostate cancer in a patient, comprising detecting in a biological sample obtained from the patient a level or functional activity of an aberrant expression product of a gene selected from the group consisting of PSA and *KLK2*, which level or functional activity correlates with the presence or risk of prostate cancer, wherein the aberrant expression product is selected from the group consisting of PSA RP2 transcript 1, PSA RP2 transcript 2, *KLK2* 10A transcript and a polypeptide encoded by any one of these transcripts.

59. (New) The method of claim 1, wherein the aberrant expression product is a transcript comprising the sequence set forth in SEQ ID NO: 7.

60. (New) The method of claim 1, wherein the aberrant expression product is a transcript comprising the sequence set forth in SEQ ID NO: 1.

61. (New) The method of claim 1, wherein the aberrant expression product is a transcript comprising the sequence set forth in SEQ ID NO: 3.

62. (New) The method of claim 1, wherein the aberrant expression product is a transcript comprising the sequence set forth in SEQ ID NO: 5.

63. (New) The method of claim 1, wherein the aberrant expression product is a polypeptide comprising the sequence set forth in SEQ ID NO: 2.

64. (New) The method of claim 1, wherein the aberrant expression product is a polypeptide comprising the sequence set forth in SEQ ID NO: 4.

65. (New) The method of claim 1, wherein the aberrant expression product is a polypeptide comprising the sequence set forth in SEQ ID NO: 6.

66. (New) The method of claim 1, wherein the aberrant expression product is a transcript comprising the sequence set forth in SEQ ID NO: 9.

67. (New) The method of claim 1, wherein the aberrant expression product is a transcript comprising the sequence set forth in SEQ ID NO: 11.

68. (New) The method of claim 1, wherein the aberrant expression product is a transcript comprising the sequence set forth in SEQ ID NO: 13.

69. (New) The method of claim 1, wherein the aberrant expression product is a polypeptide comprising the sequence set forth in SEQ ID NO: 10.

70. (New) The method of claim 1, wherein the aberrant expression product is a polypeptide comprising the sequence set forth in SEQ ID NO: 12.

71. (New) The method of claim 1, wherein the aberrant expression product is a polypeptide comprising the sequence set forth in SEQ ID NO: 14.

72. (New) The method of claim 1, wherein the correlation with the presence or risk of prostate cancer is made when the level or functional activity of the aberrant expression product in the biological sample is at least 10% higher than a reference level or functional activity of the expression product that correlates with the presence or risk of benign prostatic hyperplasia.

73. (New) The method of claim 1, further comprising quantifying an aberrant polypeptide product of the gene.

74. (New) The method of claim 1, further comprising quantifying an aberrant polypeptide product of the gene, wherein the aberrant polypeptide product is quantified by:

- contacting the biological sample with an antigen-binding molecule that is immunointeractive with the aberrant polypeptide product;

- measuring the concentration of a complex comprising the aberrant polypeptide product and the antigen binding molecule in the contacted sample; and
- relating the measured complex concentration to the concentration of the aberrant polypeptide product in the sample.

75. (New) The method of claim 17, wherein the concentration of the aberrant polypeptide product in the biological sample is compared to a reference level of the aberrant polypeptide product which correlates with the presence or risk of benign prostatic hyperplasia.

76. (New) The method of claim 1, further comprising measuring the level of an aberrant transcript product of the gene in the biological sample.

77. (New) The method of claim 19, wherein the level of the transcript in the biological sample is compared to a reference level of the transcript which correlates with the presence or risk of benign prostatic hyperplasia.

78. (New) The method of claim 19, wherein the level of the transcript is measured using a probe that comprises a nucleotide sequence which corresponds or is complementary to at least a portion of the aberrant transcript.

79. (New) The method of claim 19, wherein the level of an aberrant transcript is quantified using a nucleic acid amplification technique that quantifies the aberrant transcript in real-time.

80. (New) The method of claim 1, comprising indirectly analysing the level of an aberrant polypeptide product of the gene.

81. (New) The method of claim 1, comprising indirectly analysing the level of an aberrant polypeptide product by qualitatively or quantitatively determining in the biological sample the level of an antigen-binding molecule that is immuno-interactive with the aberrant polypeptide product.

82. (New) The method of claim 24, comprising:
- contacting the biological sample with an antigen corresponding to at least a portion of the aberrant polypeptide product;
  - measuring the concentration of a complex comprising the antigen and an antigen-binding molecule in the contacted sample; and
  - relating the measured complex concentration to the concentration of antigen-binding molecule in the sample to thereby determine the amount or level of the aberrant polypeptide product in the sample.
83. (New) The method of claim 1, wherein the prostate cancer is metastatic prostate cancer.
84. (New) The method of claim 26, wherein the metastatic prostate cancer is associated with metastasis to a bone or lymph node of the patient.
85. (New) The method of claim 1, wherein the expression product is present intracellularly.
86. (New) The method of claim 1, wherein the expression product is present in soluble form.
87. (New) The method of claim 29, wherein, the biological sample comprises a biological fluid selected from seminal fluid, whole blood, serum or lymphatic fluid.
88. (New) The method of claim 1, wherein the prostate cancer is an organ-confined prostate cancer.
89. (New) A method for detecting the presence or diagnosing the risk of prostate cancer in a patient, comprising detecting in a biological sample obtained from the patient a level or functional activity of an aberrant expression product of a gene selected from the group

consisting of PSA and *KLK2*, which level or functional activity correlates with the presence or risk of prostate cancer.

90. (New) A method for detecting the presence or diagnosing the risk of prostate cancer in a patient, comprising detecting in a biological sample obtained from the patient a level or functional activity of an aberrant expression product of a gene selected from the group consisting of PSA and *KLK2*, which level or functional activity is higher than a reference level or functional activity of the expression product which correlates with the presence or risk of benign prostatic hyperplasia.

91. (New) A method for detecting the presence or diagnosing the risk of prostate cancer in a patient, comprising detecting in a biological sample obtained from the patient a level or functional activity of a transcript selected from the group consisting of PSA RP2 transcript 1, PSA RP2 transcript 2 and *KLK2* 10A, which level or functional activity correlates with the presence or risk of prostate cancer.

92. (New) A method for detecting the presence or diagnosing the risk of prostate cancer in a patient, comprising detecting in a biological sample obtained from the patient a level or functional activity of a transcript selected from the group consisting of PSA RP2 transcript 2 and *KLK2* 10A, which level or functional activity correlates with the presence or risk of prostate cancer.

93. (New) A method for detecting the presence or diagnosing the risk of metastatic prostate cancer in a patient, comprising detecting in a biological sample obtained from the patient a level or functional activity of an aberrant expression product of a gene selected from the group consisting of PSA and *KLK2*, which level or functional activity correlates with the presence or risk of prostate cancer, wherein the biological sample comprises a fluid or tissue other than prostate tissue.

94. (New) A method for detecting the presence or diagnosing the risk of organ-confined prostate cancer in a patient, comprising detecting in a biological sample obtained from

the patient the absence of a level or functional activity of an aberrant expression product of a gene selected from the group consisting of PSA and *KLK2*, which correlates with the presence or risk of prostate cancer, wherein the biological sample comprises a fluid or tissue other than prostate tissue.

95. (New) A method for the treatment and/or prophylaxis of a prostate cancer, comprising administering to a patient in need thereof an effective amount of an agent selected from an antisense oligonucleotide, a ribozyme or an RNAi-mediating molecule that binds to, or otherwise eracts specifically with, an aberrant transcript of a gene selected from level or functional activity PSA and *KLK2*, whose level or functional activity correlates with the presence or risk of prostate cancer, wherein the agent is optionally formulated with a pharmaceutically acceptable carrier.

96. (New) A method for the treatment and/or prophylaxis of a prostate cancer, comprising administering to a patient in need thereof an effective amount of an antigen-binding molecule that is immuno-interactive with an aberrant polypeptide product of a gene selected from level or functional activity PSA and *KLK2*, whose level or functional activity correlates with the presence or risk of prostate cancer, wherein the antigen-binding molecule is optionally formulated with a pharmaceutically acceptable carrier.

97. (New) A method for the treatment and/or prophylaxis of a prostate cancer, comprising administering to a patient in need thereof an effective amount of an antigen-binding molecule that is immuno-interactive with an aberrant polypeptide product of a gene selected from level or functional activity PSA and *KLK2*, whose level or functional activity correlates with the presence or risk of prostate cancer, wherein the antigen-binding molecule is optionally formulated with a pharmaceutically acceptable carrier.

98. (New) A method for the treatment and/or prophylaxis of a prostate cancer, comprising administering to a patient in need thereof an effective amount of an antigen-presenting cell expressing a processed form of an aberrant polypeptide product of a gene selected

from level or functional activity PSA and *KLK2* for presentation to, and modulation of, T cells, which level or functional activity of the expression product correlates with the presence or risk of prostate cancer, wherein the antigen-presenting cell is optionally formulated with a pharmaceutically acceptable carrier.